

What is claimed

1. A compressible, flexible, polymer fiber blanket comprising a
5 plurality of individual pieces of polymer fiber blanket bonded together,
wherein said plurality of individual pieces of polymer fiber blanket are
produced from a thermally bonded polymer blanket product.
2. The compressible, flexible, polymer fiber blanket of claim 1,
10 wherein said thermally bonded polymer blanket product comprises staple
fibers and bicomponent fibers.
3. The compressible, flexible, polymer fiber blanket of claim 2,
staple fibers comprise glass fibers and said and bicomponent fibers
15 comprise thermoplastic fibers.
4. The compressible, flexible, polymer fiber blanket of claim 1,
wherein said individual pieces of polymer fiber blanket are made of scrap
polymer fiber blanket.
20
5. The compressible, flexible, polymer fiber blanket of claim 1,
wherein said individual pieces of polymer fiber blanket are randomly
oriented.
- 25 6. The compressible, flexible polymer fiber blanket of claim 1,
wherein said individual pieces of polymer fiber blanket are arranged in a
controlled pattern.

6. The compressible, flexible polymer fiber blanket of claim 1, wherein said individual pieces of polymer fiber blanket are geometric in shape.

5 7. The compressible, flexible polymer fiber blanket of claim 1, wherein said individual pieces of polymer fiber blanket comprise a lofty, acoustically insulating portion having a density of between substantially 8.0 - 80.0 kg/m³ and a relatively higher density skin along at least one face thereof, said skin having a thickness of between substantially
10 0.25 - 10.0 mm and a density of between substantially 32.0 - 80.0 kg/m³.

8. The compressible, flexible polymer fiber blanket of claim 1, wherein said blanket is an automotive undercarpet.

15 9. The compressible, flexible polymer fiber blanket of claim 1, wherein said blanket is a nonlaminated.

10. The compressible, flexible polymer fiber blanket of claim 1, wherein said polymer fiber blanket has a percent wet compression of
20 between about 15 to about 18 percent.

11. The compressible, flexible polymer fiber blanket of claim 1, wherein said polymer fiber blanket has a percent dry compression of between about 16 to about 21 percent.

25

12. The compressible, flexible polymer fiber blanket of claim 1, wherein said polymer fiber blanket has a percent dry wet recovery of between about 85 to about 87.5 percent.

13. The compressible, flexible polymer fiber blanket of claim 1, wherein said polymer blanket is thermally bonded to at least one uniform layer of flexible, polymeric fibrous material.

5

14. The compressible, flexible polymer fiber blanket of claim 13 further comprising a second polymer blanket comprising a plurality of individual pieces of polymer fiber blanket bonded together in a pattern, wherein said plurality of individual pieces of polymer fiber blanket are produced from a thermally bonded polymer blanket product, wherein said second polymer blanket is positioned between said uniform layer of flexible, polymeric fibrous material and said compressible, flexible polymer fiber blanket.

15 14. The compressible, flexible polymer fiber blanket of claim 13, wherein said polymeric fibrous material has a lofty, acoustically insulating portion having a density of between substantially $8.0 - 80.0 \text{ kg/m}^3$ and a relatively higher density skin along a first face thereof, said skin having a thickness of between substantially $0.25 - 10.0 \text{ mm}$ and a density of between substantially $32.0 - 800.0 \text{ kg/m}^3$, said fibrous material being selected from a group consisting of (a) thermoplastic polymer staple fibers and thermoplastic bicomponent fibers, (b) glass staple fibers and thermoplastic bicomponent fibers and (c) a combination of (a) and (b).

25 15. The compressible, flexible polymer fiber blanket of claim 14, wherein said fibrous material is selected from a group of materials consisting of polyester, polyethylene, polypropylene, nylon, glass fibers, natural fibers and any mixtures thereof.

16. The compressible, flexible polymer fiber blanket of claim 14,
wherein said polymeric fibrous material includes said relatively higher
density skin along a second face thereof.

5

17. The compressible, flexible polymer fiber blanket of claim 1,
wherein said blanket further comprises at least one facing layer.

18. The compressible, flexible polymer fiber blanket of claim 17,
10 wherein said facing layer comprises metallic foil, glass mats,
polymer mats and blends thereof.

19. The compressible, flexible polymer fiber blanket of claim 1,
wherein said blanket further comprises at least one water barrier layer.

15

20. A method of producing a compressible, flexible polymer fiber
blanket comprising the steps of:

- a) providing a plurality of individual pieces of polymer fiber
blanket;
- 20 b) laying said plurality of pieces of polymer fiber blanket in a
randomly oriented pattern;
- c) applying sufficient heat and pressure to said plurality of
individual pieces of polymer fiber blanket to form said
compressible, flexible polymer fiber blanket.

25

21. The method of claim 20, wherein said wherein said individual
pieces of polymer fiber blanket are made of scrap polymer fiber blanket.

22. The method of claim 20, wherein said individual pieces of polymer fiber blanket are geometric in shape.

23. The method of claim 20, wherein said individual pieces of polymer fiber blanket comprise a lofty, acoustically insulating portion having a density of between substantially 8.0 - 80.0 kg/m³ and a relatively higher density skin along at least one face thereof, said skin having a thickness of between substantially 0.25 - 10.0 mm and a density of between substantially 32.0 - 800.0 kg/m³.

10

24. The method of claim 20, wherein said blanket is an automotive undercarpet.

25. The method of claim 20, wherein said pad is a nonlamine.

15

26. The method of claim 20, wherein said polymer fiber blanket has a percent wet compression of between about 15 to about 18 percent.

27. The method of claim 20, wherein said polymer fiber blanket has a percent dry compression of between about 16 to about 21 percent.

20

28. The method of claim 20, wherein said polymer fiber blanket has a percent dry wet recovery of between about 85 to about 87.5 percent.

29. The method of claim 20, wherein said polymer fiber blanket has a compressive strength value of

25

30. The method of claim 20, wherein said polymer blanket is

thermally bonded to at least one layer of flexible, polymeric fibrous material.

31. The method of claim 26, wherein said polymeric fibrous material
5 has a lofty, acoustically insulating portion having a density of between substantially 8.0 - 80.0 kg/m³ and a relatively higher density skin along a first face thereof, said skin having a thickness of between substantially 0.25 - 10.0 mm and a density of between substantially 32.0 - 800.0 kg/m³, said fibrous material being selected from a group consisting of (a) thermoplastic
10 polymer staple fibers and thermoplastic bicomponent fibers, (b) glass staple fibers and thermoplastic bicomponent fibers and (c) a combination of (a) and (b).

32. The method of claim 31, wherein said fibrous material is selected
15 from a group of materials consisting of polyester, polyethylene, polypropylene, nylon, glass fibers, natural fibers and any mixtures thereof.

33. The method of claim 31, wherein said polymeric fibrous material includes said relatively higher density skin along a second face thereof.

20

34. The method of claim 20, wherein said blanket further comprises at least one water barrier layer.

35. A compressible, flexible, polymer fiber blanket comprising a
25 plurality of individual pieces of polymer fiber blanket thermally bonded together wherein said individual pieces of polymer fiber blanket comprise fibrous material having a lofty, acoustically insulating portion having a density of between substantially 8.0 - 80.0 kg/m³ and a relatively higher

- density skin along a first face thereof, said skin having a thickness of between substantially 0.25 - 10.0 mm and a density of between substantially 32.0 - 800.0 kg/m³, said fibrous material being selected from a group consisting of (a) thermoplastic polymer staple fibers and thermoplastic
- 5 bicomponent fibers, (b) glass staple fibers and thermoplastic bicomponent fibers and (c) a combination of (a) and (b).